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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/676,392	10/01/2003	Jordi Arnabat Benedicto	200309031-1	9154

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HEWLETT-PACKARD COMPANY  
Intellectual Property Administration  
P.O. Box 272400  
Fort Collins, CO 80527-2400

EXAMINER
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SARPONG, AKWASI

ART UNIT	PAPER NUMBER
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2625

MAIL DATE	DELIVERY MODE
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07/23/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	10/676,392	BENEDICTO ET AL.
	<b>Examiner</b>	<b>Art Unit</b>
	AKWASI M. SARPONG	2625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on \_\_\_\_.
- 2a) This action is **FINAL**.                            2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-5, 7 and 17-34 is/are pending in the application.
  - 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_ is/are allowed.
- 6) Claim(s) 1-5, 7 and 17-34 is/are rejected.
- 7) Claim(s) \_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 22 May 2008 is/are: a) accepted or b) objected to by the Examiner.
 

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. ____ .
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)	5) <input type="checkbox"/> Notice of Informal Patent Application
Paper No(s)/Mail Date ____ .	6) <input type="checkbox"/> Other: ____ .

**DETAILED ACTION**

***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 05/22/2008 has been entered.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

1. Claims 1-5,7 and 17- 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kuan (2004/0233482) in view of Segawa (5818612) and further in view of Yeung (6377703)

**Claim 1**, Kuan discloses a method for scanning media (Fig. 6), the method comprising

preview scanning a platen (**Fig. 3 shows that El. 25 is placed on the platen**) using a dedicated preview image light (**Fig. 3 El. 28, Paragraph 002**)

pre-processing image data obtained through the preview scanning of the platen to automatically determine settings to apply during a subsequent final scan (**Paragraph 0035 Lines 13-16-Thus the user indicates a desired portion of the scanned image which is scanned at a higher resolution therefore there has been pre-processed that has taking place**).

applying the settings obtained during the preview scanning to perform the subsequent final scan of the media at a relatively high resolution using a both the first and the second light which output a high-resolution image (**high quality scan**) (**Section 0035- thus the settings or the parameters used for the pre-scan is the same one used for the final scan and therefore the obtained settings during the pre-scan is what is used for the subsequent final scan, the pre-scan process help the user to choose the area that the user desires, Section 003, thus the document is secondly or finally scanned by both lights which eventually produce a higher quality image**).

(**Kuan discloses a single image sensor (Fig. 8 El. 28) with two lights (Fig. 8 Elements 24 and 26)**)

Kuan does not disclose two different image sensors which one of them can be dedicated as a preview sensor and are separate from each other.

Segawa discloses a scanner which comprises of two different image sensors which are of different resolution and are also separate of each other used for pre and

final scanning purposes. (**Col. 3 lines 39-52- thus image sensor 43 and 15 are separate**). Therefore it will be obvious to one ordinary skill in the art at the time the invention was made to modify Kuan's single sensor to include Segawa's double sensor which is of different resolution so that the single burden of Kuan's sensor can be shared among the two sensors as taught by Segawa.

Kuan in view of Segawa does clearly teach that some of the determinations made by the user to detect either the image data is a black and white or is color.

Yeung discloses clearly that after the pre-scan process it is determined that in order for the user to get a good quality final scan, the image type has to be determined using the same settings as the one used for the pre-scan image. Hence the image data is collected from the pre-scan image data to determine the image type. (**Abstract and Col. 5 Lines 4-33, thus the image type can be “black and white vs color or if it is an image of text**). Therefore it will be obvious to one ordinary skilled in the art at the time the invention was made to modify Kuan in view of Segawa pre-scan processor include Yeung's processor that makes the determination of the type of the image (i.e color vs. black and white or photo vs text) so that the actual type of the image will be determined for a good quality image as disclosed by Yeung in Col. 5 Lines 15-25.

**Claim 2, Kuan (Col. 3 Lines 2-15, thus the main purpose of the final scan is to use the data collected from the pre-scan to determine the orientation (comprise**

**media size) of the image data)** in view of Segawa and further in view of Yeung discloses wherein the settings include detecting black and white versus color of the media and detecting a document size of the media. (**Yeung: Col. 5 Lines 15-33, Fig. 3, El. 316 show clearly that the system makes a determination or detect whether the image is a Black or white vs color)**

**Claim 3, Kuan (Sect. 0029, Fig. 5 Element 26 is dedicated light for pre-view scanning)** in view of Segawa and further in view of Yeung discloses wherein the platen using a dedicated preview image sensor is fixed within a scanning unit of an imaging device.

**Claim 4, Kuan (Sect. 0035 Lines 1-4, Fig. 4)** in view of Segawa (Col. 3 Lines 62-67) and further in view of Yeung discloses wherein scanning a platen comprises capturing an image of the entire media using the dedicated preview image sensor instantaneously.

**Claim 5, “wherein pre-processing comprises at least one of performing automatic copy type detection, automatic document size detection, automatic skew detection, zoning analysis, background/foreground determination, document classification, template matching, and an ink requirement estimate”** reads on Kuan’s zone analysis by indicating a region desired to the user. (**Sect. 0035, Lines 13-**

**16, the user does zone analysis since the area or range of interest is to be determined and rescanned).**

**Claim 6, Cancelled**

**Claim 7, Kuan (Sect. 0035 Lines 13-16) in view of Segawa and further in view of Yeung discloses wherein the settings include size of the media and skew of the media (Kuan: Section-0035, Lines 13-16, Kuan teaches that region of the document that is desired based on the preview result can be indicated and therefore means that he analyzing that zone or region and therefore the size or region of the image helps determines the size of the media that is going to be used to print it or output .)**

**Claim 8-16, Cancelled**

**Claim 17, Kuan discloses a scanning unit (Fig. 8 Element 50) for use in an imaging device, comprising:**

**a dedicated preview scanning module comprising a first image light having a first resolution (Sect. 0035 Lines 7-17, Fig. 3 El. 24-thus the second light is used during the first or preview scan which scans the image at a lower resolution).**

**a final scanning module (Sect. 0035, Lines 15-23, Fig. 3 Element 23) comprising a second image light (Fig. 8 Element 24 and 26) having a second**

resolution that is higher than the first resolution (**Paragraph 0037 Lines 6-15-Hence the image is scanned at a higher resolution with both light**) and

an image processor (**Controller 30**) that is configured to perform a preview scan using the dedicated preview scanning module to pre-process image data collected by the dedicated preview scanning module during the preview scan, (**Section 0035, Fig. 3 El. 30-Thus the controller causes the second light to scan first and the controller causes the scanner to scan the indicated region desired by the user and therefore the controller pre-process the image data during the preview scan**) to determine settings from the image data collected by the dedicated preview scanning module during the preview scan and to use the settings from the image data collected during the preview scan to perform the final scan using the final scanning module. (**Sect. 0022 Lines 21-31, Fig. 8 Element 30-thus both lights scan the indicated regions which were indicated by the user after the preview scan and therefore both lights use the settings determined by the user**) and (**Section 0035. thus the settings that was used for the pre-scan is the same that is used for the final scan since there was not mentioned of any changes in the settings of the final scan after the pre-scan process**).

Kuan does not disclose two separate photo-sensors which have lower and higher resolution used for preview images.

Segawa discloses two separate photo-sensors which have low and high resolution used for pre and final scanning images. (**Col. 3 Line 39-50- thus image sensor 43 and 15 are separate**). Therefore it will be obvious to one ordinary skill in

the art at the time the invention was made to modify Kuan's single sensor to include Segawa's double sensors which is of different resolution used for pre and final scanning purposes so that the single burden of Kuan's sensor can be shared among the two sensors as taught by Segawa.

Kuan in view of Segawa does clearly teach that some of the determinations made by the user to detect either the image data is a black and white or is color.

Yeung discloses clearly that after the pre-scan process it is determined that in order for the user to get a good quality final scan, the image type has to be determined using the same settings as the one used for the pre-scan image. Hence the image data is collected from the pre-scan image data to determine the image type. (**Abstract and Col. 5 Lines 4-33, thus the image type can be “black and white vs color or if it is an image of text**). Therefore it will be obvious to one ordinary skilled in the art at the time the invention was made to modify Kuan in view of Segawa pre-scan processor include Yeung's processor that makes the determination of the type of the image (i.e color vs. black and white or photo vs text) so that the actual type of the image will be determined for a good quality image as disclosed by Yeung in Col. 5 Lines 15-25.

**Claim 18**, Kuan in view of Segawa (**Fig. 2 Element 23 and 25, thus both of these units are located in the same unit**) and further in view of Yeung discloses

wherein the dedicated preview-scanning module is fixed within the scanning unit so as not to be movable within the unit.

**Claim 19**, Kuan (**Fig. 8 Element 23**) in view of Segawa (**Fig. 3 Clearly shows that the sensors do not move during scanning**) and further in view of Yeung discloses wherein the dedicated scanning module is displaceable to facilitate scanning.

**Claim 20**, Kuan (**Sect. 0021 Lines 6-7 Fig. 8 Element 25 and 28**) in view of Segawa and further in view of Yeung discloses a platen on which media may be placed, wherein the dedicated preview-scanning module is positioned directly opposite the platen such that the first image sensor directly faces the platen.

**Claim 21**, "wherein the dedicated preview scanning module is positioned at an angle relative to the platen such that the first image sensor does not directly face the platen" reads on Kuan's photo sensor as disclosed in Fig. 8 Element 28.

**Claim 22**, "wherein the dedicated preview scanning module further comprises a wide angle lens" reads on Segawa's photo sensor because the lens in the sensor is able to capture the whole image of Element 43 in Fig. 3.

**Claim 23**, Kuan (**Sect. 0022 Lines 21-31 Fig. 8 Element 30**) in view of Segawa and further in view of Yeung discloses wherein the image processor comprises at least one processing algorithm and a buffer.

**Claim 24**, Kuan (**Fig. 8 Element 26**) in view of Segawa and further in view of Yeung discloses wherein a light source that is configured to facilitate delivery of reflected light to the first image sensor of the dedicated preview-scanning module.

**Claim 25**, Kuan (**Fig. 8 Element 26**) in view of Segawa and further in view of Yeung further discloses a reflector that is configured to facilitate delivery of reflected light to the first image sensor of the dedicated preview-scanning module.

**Claim 26**, Kuan (**Sect. 0022 Lines 1-4 Fig 4 Elements A and B**) in view of Segawa and further in view of Yeung (**Col. 1 lines 23-30, thus both low and high resolution is clearly stated as been 50dpi for low and 600dpi for high resolution which is in the range stated**).

**Claim 27**, Kuan discloses an imaging device (**Fig. 7 Element 50**), comprising:  
a scanning unit (**Fig. 8 Element 23**) including a dedicated preview scanning module comprising a first image light having a first resolution, (**Section 0037, Fig. 8 Element 26-thus the image is first scanned at a different resolution**),

a final scanning module comprising a second image light having a second resolution that is higher than the first resolution (**Section 0037, Lines 8-17, Fig. 8 Element 24 and 26**),

and an image processor (**Controller 30**) that is configured to perform a preview scan during the preview scanning module (**Section 0036, Lines 11-15**-thus the controller causes only the second light to scan the first or during preview) pre-process image data collected by the dedicated preview-scanning module to determine settings to be used to operate the final scanning module (**the controller causes both lights to scan the indicated region and therefore pre-process the image data**) to pre-process image data collected by the dedicated preview scanning module during the preview scan, to use the image data collected during the preview scan to determine settings to be used to operate the final scanning module (**Section 0035, thus as kuan discloses clearly the settings that is used for the preview scan is used for the final scan and also the settings used for the pre-scan helps the user to determine the regions or zone that need further scanning and therefore the settings used for the final scan is determined from the initial pre-scan process**) and

a printing module that is configured to generate hard copy documents from received image data. (**Kuan teaches a copier and copiers inherently have print modules**).

Kuan does not disclose two separate photo-sensors which have lower and higher resolution used for preview images.

Segawa discloses two separate photo-sensors which have low and high resolution used for pre and final scanning purposes of images. (**Col. 3 Line 39-50- thus image sensor 43 and 15 are separate**). Therefore it will be obvious to one ordinary skill in the art at the time the invention was made to modify Kuan's single sensor to include Segawa's double sensors which is of different resolution so that the single burden of Kuan's sensor can be shared among the two sensors as taught by Segawa.

Kuan in view of Segawa does clearly teach that some of the determinations made by the user to detect either the image data is a black and white or is color.

Yeung discloses clearly that after the pre-scan process it is determined that in order for the user to get a good quality final scan, the image type has to be determined using the same settings as the one used for the pre-scan image. Hence the image data is collected from the pre-scan image data to determine the image type. (**Abstract and Col. 5 Lines 4-33, thus the image type can be “black and white vs color or if it is an image of text**). Therefore it will be obvious to one ordinary skilled in the art at the time the invention was made to modify Kuan in view of Segawa pre-scan processor include Yeung's processor that makes the determination of the type of the image (i.e color vs. black and white or photo vs text) so that the actual type of the image will be determined for a good quality image as disclosed by Yeung in Col. 5 Lines 15-25.

**Claim 28**, Kuan (**Section 0027**) in view of Segawa (**Col. 3 Lines 40-50**) and further in view of Yeung discloses wherein the dedicated preview-scanning module comprises a low-resolution image Sensor.

**Claim 29**, Kuan (**Sect. 0022 Lines 1-4 Fig 8 Elements 26 and 24**) in view of Segawa and further in view of Yeung (**Col. 1 Lines 23-30, thus both low and high resolution is clearly stated as been 50dpi for low and 600dpi for high resolution which is in the range stated**) discloses wherein the low-resolution image sensor has a resolution of approximately 30-150 points per inch (ppi).

**Claim 30**, Kuan (**Fig. 5 Element 26**) in view of Segawa (**Fig. 3 Clearly shows that El. 43 does not move and therefore it is fixed**) further discloses wherein the dedicated preview image sensor is fixed within a scanning unit of an imaging device.

**Claim 31**, Kuan in view of Segawa (**Col. 3 Lines 45-50**) discloses wherein the final scanning module comprises a high-resolution image module. (**Kuan: Fig. 8 Element 26 and 24-since both light scans at a higher resolution**).

**Claim 32**, Kuan (**Sect. 0037 Lines 12-15**) in view of Segawa (**Col. 3 Lines 45-50**) discloses resolution image sensor has a resolution of approximately 600-1200 points per inch (ppi).

**Claim 33, Kuan (Fig. 8 Element 25-thus the document as shown is placed on the platen) in view of Segawa and further in view of Yeung discloses a platen on which media may be placed, wherein the dedicated preview scanning module is positioned directly opposite the platen such an image sensor of the dedicated preview scanning module directly faces the platen.**

**Claim 34, “wherein the dedicated preview scanning module is positioned at an angle relative to the platen such that an image sensor of the dedicated preview scanning module does not directly face the platen” reads on Kuan’s Fig. 8 El. 28 by being able to capture the entire platen.**

**Claim 26, Kuan (Sect. 0022 Lines 1-4 Fig 4 Elements A and B) in view of Segawa and further in view of Yeung (Col. 1 lines 23-30, thus both low and high resolution is clearly stated as been 50dpi for low and 600dpi for high resolution which is in the range stated).**

**Claim 29, Kuan (Sect. 0022 Lines 1-4 Fig 8 Elements 26 and 24) in view of Segawa and further in view of Yeung (Col. 1 Lines 23-30, thus both low and high resolution is clearly stated as been 50dpi for low and 600dpi for high resolution which is in the range stated) discloses wherein the low-resolution image sensor has a resolution of approximately 30-150 points per inch (ppi).**

**Response to Applicant's argument.**

Remarks filed by the applicant on 02/22/2008 was considered but was not persuasive.

**Regarding Claims 1-34,** the applicant argues that Kuan fails to teach or suggest that the pre-scan obtained in his invention is used to determine settings to apply during the final scan, thus the applicant makes this assertion because for some reason he is deducing that the user changes after the pre-scan and therefore the settings used in the pre-scan is not the same as the one used for the pre-scan.

**In reply,** Examiner respectfully disagrees because Kuan clearly states that the main reason for the pre-scan and the final scan is to define a desire area that needs further or another scan for better quality. He did not mention in any of his disclosure about changing any settings instead he states clearly in Section 0035.

More over, Section 0035- thus Kuan discloses clearly that the settings that is used for the preview scan is used for the final scan and also the settings used for the pre-scan helps the user to determine the regions or zone that need further scanning and therefore the settings used for the final scan is determined from the initial pre-scan process and that the settings used are the same used for both final and pre-scan.

1. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to AKWASI M. SARPONG whose telephone number is (571)270-3438. The examiner can normally be reached on Monday-Friday 8:00am-5:00pm est.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, King Poon can be reached on 571-272-7440. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/King Y. Poon/  
Supervisory Patent Examiner, Art Unit 2625

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